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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.		Applicant(s)
Office Action Summary	09/476,618		KURZYNSKI ET AL.
	Examiner		Art Unit
	Etienne P LeRoux		2171

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on <u>05 November 2003</u> .

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>3,4,9-11,13-24,27,28,34,35 and 37-47</u> is/are pending in the application.

  4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>3,4,9-11,13-24,27,28,34,35 and 37-47</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>31 December 1999</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

  If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

  a)☐ All b)☐ Some * c)☐ None of:

  1.☐ Certified copies of the priority documents have been received.

  2.☐ Certified copies of the priority documents have been received in Application No. _____ .

  3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
  application from the International Bureau (PCT Rule 17.2(a)).

  * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

  a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)		4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .	
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) ☐ Notice of Informal Patent Application (PTO-152)	
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .		6) ☐ Other: .	

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 3, 4, 9, 13-19, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated

by US Pat No 5,367,698 issued to Webber et al (hereafter Webber).

Claim 3:

        Webber discloses:

- prioritizing the user selected files using a prioritization scheme [col 5, lines 56-68];

- unloading from the memory of the workstation an unload file having a lower priority than

  at least one of the user selected files stored in memory, wherein the unload file includes

  at least a portion of at least one of the user selected files [col 5, lines 56-68];

- saving settings relating to the unload file in the workstation before the unloading step,

  wherein the saving step includes saving changes made by a user to the unload file

  including at least one of display settings, and user viewing settings [col 6, lines 32-37]

Claim 4:

        Webber discloses:

- prioritizing the user selected files using a prioritization scheme [col 5, lines 56-68],

- unloading from the memory of the workstation an unload file having a lower priority than at least one of the user selected files stored in memory, wherein the unload file includes at least a portion of at least one of the user selected files [col 5, lines 56-68]

- saving settings relating to the unload file in the workstation before the unloading step [col 5, lines 56-68], and

- reloading the unload file onto the workstation from a server, and presenting the unload file in an identical form as last presented to the user before the unloading step by utilizing the settings from the saving step, thereby the user perceiving the unload file to have been virtually open throughout [col 5, lines 41-48].

Claim 9:

Webber discloses:

- prioritizing the user selected files using a prioritization scheme [col 5, lines 56-68]

- unloading from the memory of the workstation an unload file having a lower priority than at least one of the user selected files stored in memory, wherein the unload file includes at least a portion of at least one of the user selected files [col 5, lines 56-68];

- wherein the prioritization scheme designates a higher priority to one of the user selected files that is a currently being used file than to each of the user selected files that comprise a part of a using stack [col 1, lines 54-65].

Claim 13:

Webber discloses:

- a means for prioritizing the user selected files using a prioritization scheme [col 5, lines 55-68].

- means for unloading an unload file having a lower priority than at least one of the user
  selected files stored in memory [explicitly staged out per col 6, lines 38-44],

- wherein the unload file includes at least a portion of at least one of the user selected files
  and wherein the means for prioritizing is coupled to the means for unloading [automatic
  on-demand file migration per col 6, lines 25-31]

Claim 14:

Webber discloses means for saving settings relating to the unload file before unloading

the unload file, wherein the means for saving is coupled to the means for prioritizing [inherently

disclosed per col 6, lines 32-37].

Claim 15:

Webber discloses wherein the means for saving is configured to save changes made by a

user to the unload file including at least one of display settings, user viewing settings, and other

changes to the original form of the unload file [col 6, lines 32-44].

Claim 16:

Webber discloses means for reloading the unload file onto the workstation from a server,

and means for presenting the unload file in an identical form as last presented to a user before

unloading of the unload file by utilizing the settings from the means for saving, thereby the user

perceiving the unload file to have been virtually open throughout [col 5, lines 32-48 and col 6,

lines 32-37].

Claim 17:

Webber discloses wherein the user selected files include at least one open file stored in

the memory and a new file to be stored in the memory [col 5, lines 41-48].

Claim 18:

Webber discloses means for loading the new file from a remote unit to the workstation,

and means for presenting the new file onto the workstation, wherein the loading and the

presenting of the new file occurs after the unloading of the unload file [Fig 18, File Server 102,

104, 106].

Claim 19:

Webber discloses wherein the means for prioritizing and the means for unloading are

configured to prioritize and unload, respectively, a plurality of times as desired to open each

successive new file on the workstation [col 6, lines 32-37].

Claim 27:

Webber discloses:

- a processor configured to prioritize the user selected files using a prioritization scheme
  [Fig 1, 102];

- the memory configured to unload a unload file having a lower priority than a least one of
  the user selected files stored in memory, wherein the unload file includes at least a
  portion of at least one of the user selected files and wherein the processor is coupled to
  the memory [col 5, line 40];

- wherein the memory is configured to save settings relating to the unload file before
  unloading the unload file; and wherein the settings include at least one of display settings
  and user viewing settings [col 6, lines 32-37]

Claim 28:

Webber discloses:

- a processor configured to prioritize the user selected files using a prioritization scheme; and the memory configured to unload a unload file having a lower priority than least one of the user selected files stored in memory, wherein the unload file includes at least a portion of at least one of the user selected files and wherein the processor is coupled to the memory [col 5, lines 56-68];

- wherein the memory is configured to save settings relating to the unload file before unloading the unload file, and wherein the memory is configured to reload the unload file from a server, and further comprising a display coupled to the processor and configured to present the unload file in an identical form as last presented to a user before the unload file was unloaded by utilizing the settings, thereby the user perceives the unload file to have been virtually open throughout [col 5, lines 32-48, col 6, lines 25-37].

Claims 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,359,512 issued to Nishihara (hereafter Nishihara).

Claim 45:

Nishihara discloses:

- displaying a plurality of open medical images [Fig 1 and col 1, lines 13-30];

- unloading an unloaded message selected from at least one of the plurality of open medical images from the memory of the workstation; and saving display settings of the unloaded image such that if the unloaded image is not closed and a user decides to redisplay the unloaded image, the unloaded image appears to the user as if the unloaded image had not been unloaded [Fig 4 and col 2, lines 3-42].

Claim 46:

Nishihara discloses wherein the display settings are saved in the memory of the

workstation [inherent in col 2, lines 9-25].

Claim 47:

Nishihara discloses wherein the unloaded message is transferred to a storage device

connected to the workstation by a network [Fig 1, 200].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

Claims 10, 11, 20-23, 34, 35, and 37-44 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Webber.

Claim 37:

Webber discloses prioritizing the user selected files using a prioritization scheme [col 5,

lines 56-68]

Webber fails to disclose unloading from the memory of the workstation an unload file

having a lower priority than at least one of the user selected files stored in memory, wherein the

unload file includes at least a portion of at least one of the user selected files.

However, Webber discloses bulk migration col 6, lines 17-31].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include unloading from the memory of the workstation an unload file having a lower priority than at least one of the user selected files stored in memory, wherein the unload file includes at least a portion of at least one of the user selected files.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of enabling each user to begin each day with a configurable amount of free space [col 6, lines 10-15].

Furthermore, Webber fails to disclose wherein the prioritization scheme gives priority to a first file over a second file based on the relationship of the first file to a third file, the third file having a higher priority than the first file and the second file.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme gives priority to a first file over a second file based on the relationship of the first file to a third file, the third file having a higher priority than the first file and the second file.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 10:

Webber discloses the elements of claim 37 as noted above.

Webber fails to disclose wherein the prioritization scheme does not give a higher priority to the first file than to a file that is part of a using stack.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme does not give a higher priority to the first file than to a file that is part of a using stack.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 11:

Webber discloses the elements of claim 37 as noted above.

Webber fails to disclose wherein the prioritization scheme designates a higher priority to each of the user selected files that is a related file than to each of the user selected files that is not a currently being used file, does not comprise a part of a using stack, and is not a related file.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme designates a higher priority to each of the user selected files that is a related file than to each of the user selected files that is not a currently being used file, does not comprise a part of a using stack, and is not a related file.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 38:

Webber discloses the elements of claim 37 as noted above.

Webber fails to disclose wherein there is a currently used file being displayed on a display and the prioritization scheme only gives priority to the first file for being related to the third file if the third file is the currently viewed file.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein there is a currently used file being displayed on a display and the prioritization scheme only gives priority to the first file for being related to the third file if the third file is the currently viewed file.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 34:

Webber discloses the elements of claims 37 and 38 as noted above.

Webber fails to disclose wherein the prioritization scheme does not give a higher priority to the first file than to a file that is part of a using stack.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme does not give a higher priority to the first file than to a file that is part of a using stack.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 35:

Webber discloses the elements o claims 37 and 38 as noted above.

Webber fails to disclose wherein the prioritization scheme designates a higher priority to each of the user selected files that is a related file than to each of the user selected files that is not a currently being used file, does not comprise a part of a using stack, and is not a related file.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme designates a higher priority to each of the user selected files that is a related file than to each of the user selected files that is not a currently being used file, does not comprise a part of a using stack, and is not a related file.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 39:

Webber discloses the elements of claim 37 as noted above.

Webber fails to disclose wherein the prioritization scheme has at least three levels including a first level comprising a currently viewed file; a second level comprising files in a viewing stack; and a third level comprising files related to files with a higher priority; wherein the files from the first level are designated with a higher priority than files from the second level

and files from the second level are designated with a higher priority that files from the third level.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme has at least three levels including a first level comprising a currently viewed file; a second level comprising files in a viewing stack; and a third level comprising files related to files with a higher priority; wherein the files from the first level are designated with a higher priority than files from the second level and files from the second level are designated with a higher priority that files from the third level.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 40:

Webber discloses the elements of claim 37 and 39 as noted above.

Webber fails to disclose wherein the third level only comprises files related to files from the first level.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the third level only comprises files related to files from the first level.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 20:

Webber discloses the elements of claims 13 and 17 as noted above.

Webber fails to disclose wherein the prioritization scheme designates a higher priority to the new file than to the at least one open file.

However, Webber discloses storage management utilities on the migration server [col 6, lines 50-55].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme designates a higher priority to the new file than to the at least one open file.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of replacing the open file with data from the new file.

Claim 21:

Webber discloses the elements of claim 13 as noted above.

Webber fails to disclose wherein the prioritization scheme designates a higher priority to one of the user selected files that is a currently being used file than to each of the user selected files that comprise a part of a using stack.

However, Webber discloses explicitly staging- out and efficient staging-in of multiple files [col 6, lines 38-49]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme designates a higher

priority to one of the user selected files that is a currently being used file than to each of the user selected files that comprise a part of a using stack.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of confirming that a request has been successfully made [col 1, lines 30-45]

Claim 22:

Webber discloses the elements of claim 13 as noted above.

Webber fails to disclose wherein the prioritization scheme designates a higher priority to the user selected files that comprise a part of a using stack than to each of the user selected files that is a related file.

However, Webber does disclose identifying inactive files [col 5, lines 55-68].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme designates a higher priority to the user selected files that comprise a part of a using stack than to each of the user selected files that is a related file.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of prioritizing on the basis of the most active file.

Claim 23:

Webber discloses the elements of claim 13 as noted above.

Webber fails to disclose wherein the prioritization scheme designates a higher priority to each of the user selected files that is a related file than to each of the user selected files that is not a currently being used file, does not comprise a part of a using stack, and is not a related file.

However, Webber discloses procedures for explicitly staging out specific files [col 6, lines 38-44]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme designates a higher priority to each of the user selected files that is a related file than to each of the user selected files that is not a currently being used file, does not comprise a part of a using stack, and is not a related file.

The ordinary skilled artisan would have been motivated to modify Webber per the above for the purpose of purpose of confirming an acknowledgement [col 1, line 45]

Claim 41:

Webber discloses a processor configured to prioritize the user selected files using a prioritization scheme; and the memory configured to unload a unload file having a lower priority than at least one of the user selected files stored in memory, wherein the unload file includes at least a portion of at least one of the user selected files and wherein the processor is coupled to the memory [col 5, lines 31-48 and col 6, lines 25-49];

Webber fails to disclose wherein the prioritization scheme gives priority to a first file over a second file based on the relationship of the first file to a third file, the third file having a higher priority than the first file and the second file.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme has at least three levels

including a first level comprising a currently viewed file; a second level comprising files in a viewing stack; and a third level comprising files related to files with a higher priority; wherein the files from the first level are designated with a higher priority than files from the second level and files from the second level are designated with a higher priority that files from the third level.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 42:

Webber discloses the elements of claim 37 as noted above.

Webber fails to disclose wherein there is a currently used file being displayed on a display and the prioritization scheme only gives priority to the first file for being related to the third file if the third file is the currently viewed file.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein there is a currently used file being displayed on a display and the prioritization scheme only gives priority to the first file for being related to the third file if the third file is the currently viewed file.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 43:

Webber discloses the elements of claim 37 as noted above.

Webber fails to disclose wherein the prioritization scheme has at least three levels including a first level comprising a currently viewed file; a second level comprising files in a viewing stack; and a third level comprising files related to files with a higher priority; wherein the files from the first level are designated with a higher priority than files from the second level and files from the second level are designated with a higher priority that files from the third level.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the prioritization scheme has at least three levels including a first level comprising a currently viewed file; a second level comprising files in a viewing stack; and a third level comprising files related to files with a higher priority; wherein the files from the first level are designated with a higher priority than files from the second level and files from the second level are designated with a higher priority that files from the third level.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

Claim 44:

Webber discloses the elements of claim 37 and 39 as noted above.

Webber fails to disclose wherein the third level only comprises files related to files from the first level.

However, Webber discloses creating, deleting configuring and moving client stores [col 6, lines 50-54].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein the third level only comprises files related to files from the first level.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of maintaining only the most important files in the storage system.

3.   Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Webber in view of US Pat No 6,501,905 issued to Kimura (hereafter Kimura).

Claim 24:

Webber discloses the elements of claim 13 as noted above.

Webber fails to disclose wherein each of the user selected files comprises image data representative of a plurality of images acquired from an imaging device.

Kimura discloses wherein each of the user selected files comprises image data representative of a plurality of images acquired from an imaging device [Figs 19-22]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Webber to include wherein each of the user selected files comprises image data representative of a plurality of images acquired from an imaging device as taught by Kimura.

The ordinarily skilled artisan would have been motivated to modify Webber per the above for the purpose of providing storage and display of video images [abstract].

Response to Arguments

Applicant's arguments filed 11/5/2003 have been fully considered but they are not

persuasive. .

First Applicant Argument:

Applicant states on page 10, "Claim 3 was rejected on page 2 of the Office Action.

Claim 3 has been amended to recite 'wherein the saving step includes saving changes made by a

user to the unload file including at least one of display settings and user viewing settings.' [....]

The Office Action recites that Weber '698 discloses this feature at Col. 6, lines 50-55. It is

believed that the Office Action meant to reference Col. 5, lines 50-55. Weber '698 does not

disclose this feature at Col. 6, lines 50-55 or at Col. 5, lines 50-55. Rather, Weber '698 discloses

that when files are migrated, directory information is maintained on local disks. See also Col. 5,

lines 41-44. The location of a file in a directory is unrelated to the manner in which the actual

data of the file is displayed as recited in Claim 3. Further, Weber '698 would not suggest saving

display settings or user viewing settings because Weber '698 never appears to contemplate

migrating files which are currently being displayed. Examples of the migration system

contemplated by Weber '698 can be found at Col. 6, lines 18-31."

First Examiner Response:

Examiner is not persuaded. Examiner maintains the following disclosure by Weber reads

on the claim 3 limitation 'wherein the saving step includes saving changes made by a user to the

unload file including at least one of display settings and user viewing settings.'

column 2, lines 45-53:

Moreover, the system must be transparent to users and to applications programs. Users must not be exposed to the fact that some of their files have been physically migrated to archival storage. From the user's perspective, all files must remain logically in place at all times. From the perspective of applications programs, changes to the programs must not be required to accommodate the storage system.

column 3, lines 7-12:

It is another object of the invention to provide such systems that are transparent to users and applications programs, and which automatically operate with the characteristics of magnetic disks in conjunction with user's existing or native filesystems without necessitating changes.

column 4, lines 57-60:

In each case, the file's directory information, referred to herein as the inode, remains on magnetic disk, and the pointers to the file's data are modified to reference the data's new location in the hierarchy. In accord with the invention, because the directory information remains on magnetic disk, the file remains online, logically in place, and can be referenced at all times.

column 5, lines 41-48:

Directory information is kept on the local disks and all files always appear to remain logically in place on the local disk, even after their data have been physically migrated to the migration server. When a migrated file is read or written, its data are automatically moved from the migration server back to the local disk. This feature is referred to herein as distributed hierarchical storage management.

Furthermore, examiner maintains that in above disclosure by Weber that 'wherein the saving step includes saving changes made by a user to the unload file including at least one of display settings and user viewing settings' is inherent. MPEP § 2111.03 states:

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)

Weber discloses that all files always appear to remain logically in place on the local disk and that

the system must be transparent to users and to applications programs. Therefore, it is inherent in

Weber's disclosure that display settings and user viewing settings are saved so that files can be

viewed on a transparent basis to the user.

Second Applicant Argument:

Applicant states on page 10 "Claim 4 was rejected on page 2 of the Office Action. Claim

4 recites 'unloading the unload file onto the workstation from a server, and presenting the unload

file in an identical form as last presented to the user before the unloading step by utilizing the

settings from the saving step, thereby the user perceiving the unload file to have been virtually

open throughout.' The Office Action recites that Weber '698 discloses this feature at Col. 5,

lines 41-48. Weber does not disclose this feature at Col. 5, lines 41-48. Rather, Weber '698

discloses that when files are migrated, directory information is maintained on the local disks.

The directory files are a list of closed files, not an opened file."

Second Examiner Response:

Examiner is not persuaded. Examiner maintains the following disclosure by Webber,

column 5, lines 31-47, reads on 'unloading the unload file onto the workstation from a server,

and presenting the unload file in an identical form as last presented to the user before the

unloading step by utilizing the settings from the saving step, thereby the user perceiving the

unload file to have been virtually open throughout.'

> Referring again to FIG. 1, in accordance with the invention, the migration server controls
> migration to and from local storage elements, including local disks on fileservers and
> workstations, so that the client existing filesystems and local storage elements act as a
> cache that contains recently accessed files. As that cache fills up, the migration server
> uses the protocol described below and in the attached Appendix A which can be found in
> the application file to move the least active files to the migration server. Directory

information is kept on the local disks and all files always appear to remain logically in place on the local disk, even after their data have been physically migrated to the migration server. When a migrated file is read or written, its data are automatically moved from the migration server back to the local disk. This feature is referred to herein as distributed hierarchical storage management.

Furthermore, the following disclosure by Webber, column 6, lines 32-38, reads on 'unloading the unload file onto the workstation from a server, and presenting the unload file in an identical form as last presented to the user before the unloading step by utilizing the settings from the saving step, thereby the user perceiving the unload file to have been virtually open throughout.'

> The migration server provides automatic on-demand retrieval of the data portion of files that have been staged out to the server storage when the file is read or written. This retrieval is transparent to users and applications, and the files are retrieved across the network at once to the local disk.

Third Applicant Argument:

Applicant states on page 11, "Claim 9 was rejected on page 3. Claim 9 recites 'the prioritization scheme designates a higher priority to one of the user selected files that is a currently being used file that to each of the user selected files that comprise part of a using stack.' The Office Action does not explicitly state that Webber teaches this element, but appears to imply that this element is taught at col 6, lines 3-10."

Third Examiner Response:

Examiner is not persuaded. Reference is made to the specification of instant application which states on page 6, lines 27-30:

At any given time, this multitude of opened exams and/or images will have a certain viewing sequence (also referred as a viewing stack or order) based on the order in which the user opened and/or manipulated these exams and/or images.

Considering above disclosure by applicant, examiner maintains the following, column 1, lines 54-65, reads on 'the prioritization scheme designates a higher priority to one of the user selected

files that is a currently being used file that to each of the user selected files that comprise part of

a using stack.'

> The term "working set" was first used in the context of virtual memory, where it refers to
> the amount of physical memory required by an application to execute during a limited
> period of time. If a computer does not have enough physical memory to accommodate an
> application's working set, performance degrades because the system incurs excessive
> overhead while swapping virtual pages of memory in and out of physical memory. In
> contrast, if the system has an adequate amount of physical memory, then performance is
> good because each page of virtual memory is more likely to be loaded in physical
> memory when it is needed.

Furthermore, considering above disclosure by applicant, examiner maintains the following,

column 4, lines 46-60, reads on 'the prioritization scheme designates a higher priority to one of

the user selected files that is a currently being used file that to each of the user selected files that

comprise part of a using stack.'

> Staging--When a file is staged, its data is transferred from one level to another in the data
> storage hierarchy described below. A stage-out moves the data to the next lower level in
> the hierarchy, for example, from magnetic disk to optical disk, or from optical disk to
> tape. A stage-in moves the data to the highest level in the hierarchy, for example, from
> optical disk to magnetic disk, or from tape to magnetic disk. In each case, the file's
> directory information, referred to herein as the inode, remains on magnetic disk, and the
> pointers to the file's data are modified to reference the data's new location in the
> hierarchy. In accord with the invention, because the directory information remains on
> magnetic disk, the file remains online, logically in place, and can be referenced at all
> times.

Fourth Applicant Argument:

Applicant states on page 11 "Claim 13 was rejected on page 2 of the Office Action.

Claim 13 recites 'means for prioritizing the user selected files using a prioritization scheme.'

Claim 13 is interpreted under 35 U.S.C. § 112, sixth paragraph. The Office Action states that

Webber '698 teaches this feature at Col. 5, line 40. Webber '698 does not teach a structure for

prioritizing that is the same or equivalent to the structures for prioritizing found in the present

application. Rather, Weber et al. teaches migrating the least active files to the migration server."

Fourth Examiner Response:

Examiner is not persuaded. Applicant's specification does not disclose a structure.

Reference to instant specification, page 7, lines 1-92, the following reference to a scheme for

memory management can be found:

Referring to Fig. 2, there is shown a memory management scheme 50 included in the
workstation 20. Memory management scheme 50 includes a start step 52, an initiate opening of
the *i*th exam step 54, a workstation memory capacity inquiry step 56, a download 58, a display
step exam step 60, an incrementor step 62, a lowest exam priority step 64, a save settings step 66,
a unload exam step 68, a related exam priority inquiry step 70, a viewing stack priority step 72, a
current exam priority inquiry step 74, and an end step 76. Scheme 50 is configured such that a
large number of exams can be opened at any given time in workstation 20 without having to
increase the size of memory 19 of workstation 20.

Webber discloses in column 4, lines 42-60, the following hierarchy of levels used for storage of

transferred files:

> Staging--When a file is staged, its data is transferred from one level to another in the data
> storage hierarchy described below. A stage-out moves the data to the next lower level in
> the hierarchy, for example, from magnetic disk to optical disk, or from optical disk to
> tape. A stage-in moves the data to the highest level in the hierarchy, for example, from
> optical disk to magnetic disk, or from tape to magnetic disk. In each case, the file's
> directory information, referred to herein as the inode, remains on magnetic disk, and the
> pointers to the file's data are modified to reference the data's new location in the
> hierarchy. In accord with the invention, because the directory information remains on
> magnetic disk, the file remains online, logically in place, and can be referenced at all
> times.

Webber discloses in column 6, lines 3-17, the following means of storage conservation:

> The invention provides a number of important features to users of the client systems, as
> discussed in greater detail hereinafter. In particular, the migration server enables the
> filesystem to function as a magnetic disk system having unlimited capacity, by providing
> configurable, per-client filesystem utilization levels, referred to as watermarks, which
> define a band of utilization for each filesystem. The low watermark defines the level to
> which filesystem utilization is automatically reduced periodically. This assures, for

example, that each user begins each day with a configurable amount of free space. The high-watermark defines a maximum utilization level that the filesystem is allowed to reach before the system automatically begins to make more space available.

Based on supra teaching by Webber, examiner concludes that Webber reads on the claim

limitation 'means for prioritizing the user selected files using a prioritization scheme.'

Fifth Applicant Argument:

Applicant states on page 12, "Claims 10 and 11 were rejected on page 4 of the Office

Action. Claims 10 and 11 (as amended) depend from Claim 37 which recites 'wherein the

prioritization scheme gives priority to a first file over a second file based on the relationship of

the first file to a third file, the third file having a higher priority than the first file and the second

file.' As recognized in the Office Action, Webber '698 does not disclose prioritizing a file based

on its relation to another, higher priority file."

Fifth Examiner Response:

Examiner is not persuaded. Consider the following excerpts from the MPEP.

MPEP § 2111.01 requires that "[d]uring examination, the claims must be interpreted as broadly as their terms reasonably allow. This means that the words of the claim must be given their plain meaning unless applicant has provided a clear definition in the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed Cir. 1989). One must bear in mind that, especially in nonchemical cases, the words in a claim are generally not limited in their meaning by what is shown or disclosed in the specification. It is only when the specification provides definitions for terms appearing in the claims that the specification can be used in interpreting claim language. *In re Vogel*, 422 F.2d 438, 441, 164 USPQ 619, 622 (CCPA 1970)."

MPEP § 2106 210. II.C Review the Claims:

Office personnel must always remember to use the perspective of one of ordinary skill in the art. Claims and disclosures are not to be evaluated in a vacuum. If elements of an invention are well-known in the art, the applicant does not have to provide a disclosure that describes those elements. In such a case the elements will be construed as encompassing any and every art-recognized hardware or combination of hardware and software technique for implementing the defined requisite functionalities.

Considering that applicant's specification provides no further clarification of the claim language,

examiner maintains the following rejection is relevant.

Claim 10:

Webber discloses the elements of claim 37 as noted above.

Webber fails to disclose wherein the prioritization scheme does not give a higher priority

to the first file than to a file that is part of a using stack.

However, Webber discloses creating, deleting configuring and moving client stores [col

6, lines 50-54]

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Webber to include wherein the prioritization scheme does not give a higher

priority to the first file than to a file that is part of a using stack.

The ordinarily skilled artisan would have been motivated to modify Webber per the

above for the purpose of maintaining only the most important files in the storage system.

Claim 11:

Webber discloses the elements of claim 37 as noted above.

Webber fails to disclose wherein the prioritization scheme designates a higher priority to

each of the user selected files that is a related file than to each of the user selected files that is not

a currently being used file, does not comprise a part of a using stack, and is not a related file.

However, Webber discloses creating, deleting configuring and moving client stores [col

6, lines 50-54]

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Webber to include wherein the prioritization scheme designates a higher

priority to each of the user selected files that is a related file than to each of the user selected files

that is not a currently being used file, does not comprise a part of a using stack, and is not a

related file.

The ordinarily skilled artisan would have been motivated to modify Webber per the

above for the purpose of maintaining only the most important files in the storage system.

Sixth Applicant Argument:

Applicant states on page 14 "Claim 24 was rejected on page 5 of the Office Action as

applied to Claim 13 and further in view of Kimura '905. Claim 24 depends from Claim 13. as

discussed above, Weber '698 does not teach or suggest a limitation of Claim 13. Specifically,

Webber '698 does not teach or suggest 'means for prioritizing the user selected files using a

prioritization scheme.' Kimura also fails to teach or suggest 'means for prioritizing the user

selected files using a prioritization scheme.'

Sixth Examiner Response:

Examiner is not persuaded. Webber's disclosure in column 5, lines 32-48, reads on the

claim limitation 'means for prioritizing the user selected files using a prioritization scheme.'

> Referring again to FIG. 1, in accordance with the invention, the migration server controls
> migration to and from local storage elements, including local disks on fileservers and
> workstations, so that the client existing filesystems and local storage elements act as a
> cache that contains recently accessed files. As that cache fills up, the migration server
> uses the protocol described below and in the attached Appendix A which can be found in
> the application file to move the least active files to the migration server. Directory
> information is kept on the local disks and all files always appear to remain logically in
> place on the local disk, even after their data have been physically migrated to the
> migration server. When a migrated file is read or written, its data are automatically
> moved from the migration server back to the local disk. This feature is referred to herein
> as distributed hierarchical storage management.

Furthermore, in response to applicant's arguments against the references individually, one

cannot show nonobviousness by attacking references individually where the rejections are based

on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In

re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Etienne LeRoux whose telephone number is (703) 305-0620.

The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Safet Metjahic, can be reached on (703) 308-1436.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

Etienne LeRoux

January 6, 2004

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